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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,454	01/20/2004	Jun Cao	58268.00367	7832
32294 7590 01/04/2008 SQUIRE, SANDERS & DEMPSEY L.L.P. 14TH FLOOR 8000 TOWERS CRESCENT TYSONS CORNER, VA 22182			EXAMINER BOAKYE, ALEXANDER O	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 01/04/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/759,454	Applicant(s) CAO, JUN	
	Examiner ALEXANDER BOAKYE	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-35 is/are pending in the application.
- 4a) Of the above claim(s) 1-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>01/20/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 33 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 33, the word "means" is preceded by the word(s) "for" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).
Correction is required.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims

are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 17 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,700,899. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications recite a token distribution circuit responsive to a first clock signal defining a grant cycle, and providing a plurality of token priority signals, the distribution being operative to assert a prioritized one of the token priority signals upon completion of the grant cycle; and a plurality of N grant devices coupled together by the to grant devices being responsive to a corresponding one of corresponding one of the token priority signals, and to a corresponding token carry signal with the only difference between claim 17 of the instant application and claim 1 of Patent being that claim 1 of the Patent recites corresponding token carry signal is asserted while claim 17 of the instant application does not recite such limitation. Claim 17 of the instant application is broader than claim 1 of the patent. Therefore, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to implement the claimed invention of the current application using the patent application with motivation being that it provides high performance, thus reducing arbitration latency.

Claim 18 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 2 of U.S. Patent No. 6,700,899. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications recite wherein a particular token carry signal received by a particular one of the devices is provided by an adjacent devices via the mediation device, and wherein the particular token carry signal by the adjacent device if a request signal received by the adjacent device and either a token priority signal received by the adjacent device or a token received by the adjacent device is asserted.

Claim 19 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 3 of U.S. Patent No. 6,700,899. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications recite wherein the token distribution circuit comprises an N-bit shift register having a plurality of N flip-flops, at least one N flip-flop having an output providing one of the token priority signals, and wherein one of the flip-flops is preset to an active value, and the remainder of the flip-flops is preset to an inactive value.

Claim 20 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 4 of U.S. Patent No. 6,700,899. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications recite wherein at least one of the grant devices is operative

to generate a corresponding token propagate signal in response to a corresponding request signal, and also operative to generate a corresponding token generate signal in response to a corresponding token priority signal and a corresponding request signal; and the mediation device includes a token look ahead device operative to generate the token carry signals in response to the token propagate signals and the token generate signals, the token look ahead device for increasing the operational frequency of the arbiter circuit.

Claim 21 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 5 of U.S. Patent No. 6,700,899. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications recite at least one of the grant devices is also operative to assert a corresponding token propagate signal provided that a corresponding request signal is de-asserted; and at least one of the grant devices is further operative to assert a corresponding token generate signal if a corresponding token priority signal is asserted while a corresponding request signal is de-asserted.

Claim 22 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 6 of U.S. Patent No. 6,700,899. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications recite wherein the token look ahead device includes a circuit token carry input coupled to receive one via a feed back path.

Claim 23 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 7 of U.S. Patent No. 6,700,899. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications recite a first one of the token carry signals is provided to a second one of the four grant devices in response to a token propagate signal provided by a first one of the four grant devices, a token generate signal provided by the first token carry signals; a second one of the token carry signals is provided to a third one of the four grant devices in response to token generate signals provided by the first and the second grant devices, token propagate signals provided by the first fourth token carry signal; a third one of the token carry signals is provided to a fourth one of the four grant devices in response to token generate signals provided by the first, second, and third grant devices, token propagate signals provided by the first, the fourth token carry signal.

Claim 24 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 6,700,899. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications recite a token distribution circuit responsive to a first clock signal defining a grant cycle, and providing a plurality of token priority signals, the distribution circuit being operative to assert a prioritized one of the token priority signals upon completion of at least one the grant cycle; a plurality of N grant devices coupled together by the token ring, at least one of the grant devices being responsive to a corresponding one of the request signals, to a corresponding one of the token priority

signals, and to a corresponding token carry signal with the only difference between claim 24 of the instant application and claim 8 of Patent being that claim 8 of the Patent recites corresponding token carry signal is asserted while claim 24 of the instant application does not recite such limitation. Claim 24 of the instant application is broader than claim 8 of the patent. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the claimed invention of the current application using the patent application with motivation being that it provides High performance, thus reducing arbitration latency.

Claim 25 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 9 of U.S. Patent No. 6,700,899. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications recite wherein the resource includes a packet routing table.

Claim 26 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 10 of U.S. Patent No. 6,700,899. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications recite wherein the resource is a network output port.

Claim 27 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 11 of U.S. Patent No. 6,700,899. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications recite

wherein a particular token carry signal received by a particular one of the devices is provided by an adjacent one of the devices via the mediation device, and wherein the particular token carry signal is asserted by the adjacent device if a request signal received by the adjacent device is not asserted and either a token priority signal received by the adjacent device or a token carry signal received by the adjacent device is asserted.

Claim 28 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 12 of U.S. Patent No. 6,700,899. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications recite wherein the token distribution circuit comprises an N-bit shift register having a plurality of N flip-flops, at least one N flip-flop having an output providing one of the token priority signals, and wherein one of the flip-flops is preset to an active value, and the remainder of the flip-flops is preset to an inactive value.

Claim 29 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 13 of U.S. Patent No. 6,700,899. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications recite at least one of said grant devices is operative to generate a corresponding token propagate signal in response to a corresponding request signal, and also operative to generate a corresponding token generate signal in response to a corresponding token priority signal and the corresponding request signal; a token look ahead device operative to generate the token carry signals in response to

the token propagate signals and the token generate signals, the token look ahead device for increasing the operational frequency of the arbiter circuit.

Claim 30 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 14 of U.S. Patent No. 6,700,899. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications recite wherein the grant device is also operative to assert a corresponding token propagate signal provided that a corresponding request signal is de-asserted; and at least one of the grant devices is further operative to assert a corresponding token generate signal if a corresponding token priority signal is asserted while a request signal is de-asserted.

Claim 31 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 15 of U.S. Patent No. 6,700,899. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications recite wherein the token look ahead device includes a circuit token carry input coupled to receive one of the token carry signals via a feed back path.

Claims 32 and 35 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 16 of U.S. Patent No. 6,700,899. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications recite a token distribution circuit responsive to a first clock signal defining a grant cycle, and providing a plurality of token priority signals, the distribution circuit being operative to assert a prioritized one of the token priority signals upon completion of the grant cycle; and a plurality of N grant devices, at least

one thereof being responsive to a corresponding one of the request signals, to a corresponding one of the token priority signals, and to a corresponding token carry signal provided by an adjacent one of the grant devices with the only difference between claims 32 and 35 of the instant application and claim 16 of Patent being that claim 16 of the Patent recites corresponding token carry signal is asserted while claims 32 and 35 of the instant application do not recite such limitation. Claims 32 and 35 of the instant application are broader than claim 16 of the patent. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the claimed invention of the instant application using the patent application with motivation being that it provides high performance, thus reducing arbitration latency.

Claims 33 and 34 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 6,700,899. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications recite a token distribution circuit responsive to a first clock signal defining a grant cycle, for providing a plurality of token priority signals, the distribution circuit being operative to assert a prioritized one of the token priority signals upon completion of the grant cycle; a plurality of N granting means coupled together by the token ring, at least one of the granting means being responsive to a corresponding one of the request signals, to a corresponding one of the token priority signals, and to a corresponding token carry signal with the only difference between claims 33 and 34 of the instant application and claim 8 of Patent being that claim 8 of

the Patent recites corresponding token carry signal is asserted while claims 33 and 34 of the instant application do not recite such limitation. Claims 33 and 34 of the instant application are broader than claim 8 of the patent. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the claimed invention of the current application using the patent application with motivation being that it provides high performance, thus reducing arbitration latency.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Boakye whose telephone number is (571) 272-3183. The examiner can normally be reached on M-F from 8:30am to 6:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham, can be reached on (571) 272-3179. The Fax number is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or PUBLIC PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Any inquiry of a general nature or relating to the status of this application or proceeding

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should be directed to the **Electronic Business Center (EBC)** numbers at 866-217-9197 and 703-305-3028.

Alexander Boakye

Patent Examiner

AB

01/02/08


CHI PHAM
SUPERVISORY PATENT EXAMINER

1/3/08